The Construction of a Detention Basin:
Upstream work promotes further success of downstream work

Burned Area Emergency Recovery (BAER) funds are being used for treatments in the watersheds of the Waldo Canyon burn scar. These treatments include the construction and installation of below-grade **detention basins** in priority sub-watersheds of Fountain Creek.

Sediment detention basins are effective in addressing flooding and debris flows. A series of basins are constructed in areas where there is access for mechanized equipment. Local materials (burned trees and boulders) are used to create detention basins that capture sediment and debris during flood events. As basins fill, they help to spread water out, slow water down, and lessen the destruction downstream. They also help to restore a more braided stream channel rather than the narrow and sharply descending channels that presently exist.

The following pages chronicle the development of a detention basin.

Wellington Gulch

Forest Service employees survey the basin and floodplain prior to construction.


PARTS OF A SEDIMENT BASIN
CRIB WALL
BASIN
SILL

Wellington Gulch (cont.)

A contractor creates a temporary road into the area and begins the basin excavation.

Wellington Gulch (cont.)

Basin construction requires intensive hand and heavy equipment work.

Wellington Gulch (cont.)

Local materials (burned trees and boulders) are used to create the detention basins.

Wellington Gulch (cont.)

The basin is completed and begins to retain water and sediment.

Wellington Gulch (cont.)

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